Abstract

The patent application PCT/EP02/01867 (WO 02/066629) "Recombinant vector containing infectious human cytomegalovirus genome with preserved wild-type characteristics of clinical isolates" describes the cloning of a leukotropic and endothelial cell tropic clinical isolate of human cytomegalovirus (HCMV) as a bacterial artificial chromosome (BAC) in *E. coli*. The cloned wild-type genome of HCMV was designated FIX-BAC (**F**usion-**I**nducing-Factor-**X**)-BAC (Hahn, Khan et al., 2002). The patent application PCT/EP02/01867 (WO 02/066629) also describes the construction of virus mutants using FIX-BAC technology and subsequent phenotypical testing of virus mutants for loss of wild-type features such as leukocyte and endothelial cell tropism. The genetic determinants of endothelial cell and leukocyte tropism were assigned to the UL132-UL128 genetic locus of HCMV. Moreover, the patent application PCT/EP02/01867 (WO 02/066629) describes novel transcripts within the UL131-UL128 genetic locus which are differentially spliced. The current patent application describes in more detail the UL131-128 transcripts of clinical isolates of HCMV. Translation of the newly identified transcripts showed novel open reading frames (orfs) coding for novel putative CxC and CC chemokines which are of crucial importance for HCMV pathogenesis and tissue tropism.